



Spot Test Report (TC12 & TC19)
according to EN301 406 v1.5.1 (2003-07)
Digital Enhanced Cordless Telecommunic (DECT)

Report No.: 60.860.9.048.01R

Client:	Shenzhen Guo Wei Electronics Co., Ltd.
Product:	DECT Phone
System Under Test (SUT):	DECT48-C07-RF19 (Small) (PP)
Manufacturer	Shenzhen Guo Wei Electronics Co., Ltd.
Date test item received:	2009/09/02
Date test campaign completed	2009/09/07
Date of issue:	2009/09/08
Test results:	COMPLIED

The test report include test result of conformance log layer 1.

Total number of pages of this test report: 21 pages

The test result only corresponds to the tested sample. It is not permitted to copy this report, in part or in full, without the permission of the test laboratory.

Approved by

A handwritten signature in blue ink, appearing to be 'J. H. F.' or similar, enclosed in a rectangular box.

Deputy Telecom Manager

TÜV SÜD Hong Kong Ltd.
TÜV SÜD Group
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Remarks:

1) Measurement:

Below 1GHz (using Dipole Antenna)

ERP:SG level-cable loss

2) Measurement:

Above 1GHz(using Horn Antenna)

ERP:SG level +Antenna Gain(dBi)-cable loss-EIRP transfer to ERP factor

Following record as H,V mean that testing at Horizontal, Vertical

1.1 Client identification

Name	Shenzhen Guo Wei Electronics Co., Ltd.
Contact person	Mr. C.W. Cheung
Address	No. 68, Guowei Road, Liantang Industrial District, Shenzhen, P.R.C
Phone No.	+86 755 2573 6666
Fax No.	86 755 2573 2288

1.2 Comments for testing

Delivery date of Test Candidate: 2009.09.02
The tests were done from 2009.09.02 to 2009.09.07

Test Location: T01

During the tests were present:

Mr. Jeff Pong from **TÜV SÜD Hong Kong Ltd.**

Mr. C.W. Cheung from **Shenzhen Guo Wei Electronics Co., Ltd.**

The test set-up and tests are according to EN301 406 V1.5.1(2003-07) and **DTAAB DT.04 V10 from 11/99** and the internal test comments of the test lab.

All radiated measurements were done in the anechoic chamber
The test site and the whole test equipment is according to standards
EN301 406 V1.5.1 (2003-07).

2. Test campaign report

2.1 TC 12 Spurious emissions when allocated a transmit channel (4.5.6.5)

Channel 5, radiated

30 MHz – 1 GHz	aimed \leq -36 dBm	actual \leq -50.80 dBm
1 GHz – 4 GHz	aimed \leq -30 dBm	actual \leq -40.64 dBm
Peak at 3.777 GHz hor.	aimed \leq -30 dBm	actual \leq -30.69 dBm
broadcast bands according to TBR 6	aimed \leq -47 dBm	actual \leq -65.40 dBm

Measurement uncertainty f<1GHz: + 2.89 dB / -2.98 dB
f>1GHz: + 3.53 dB / -3.53 dB

Remark: second harmonic is marginal result in uncertainty range

P
P
Remark
P

2.2 TC 19 Spurious emissions when the radio endpoint has no allocated transmit ch. (4.5.7.7)

The EUT shall conformance

Outside the DECT band:

The emission as measured shall not be greater than 2nW (-57dbm) between 30MHz and 1GHz; and between 1GHz and 12.75GHz the emission as measured shall not exceed 20nW(-47dBm).

Inside the DECT band:

The power level as measured of any spurious emission shall not exceed 2nW(-57dBm) in a 1MHz Bandwidth.

In one 1MHz band within the DECT frequency band, the maximum allowable ERP shall be less than 20nW(-47dBm)

In up to two bands of 30KHz, the maximum ERP shall less than 250nw(-36dBm)

Radiated spurious emission

RF ranges	Maximun peak power level	Result/max.value
30MHz-----1.0GHz	2nW(-57dBm)	-62.25 dBm
1GHz-----4GHz	20nW(-47dBm)	-48.73 dBm
Inside the DECT band	2nW(-57dBm)	-60.53 dBm

Measurement uncertainty radiated: + 3.53 dB / -3.53 dB

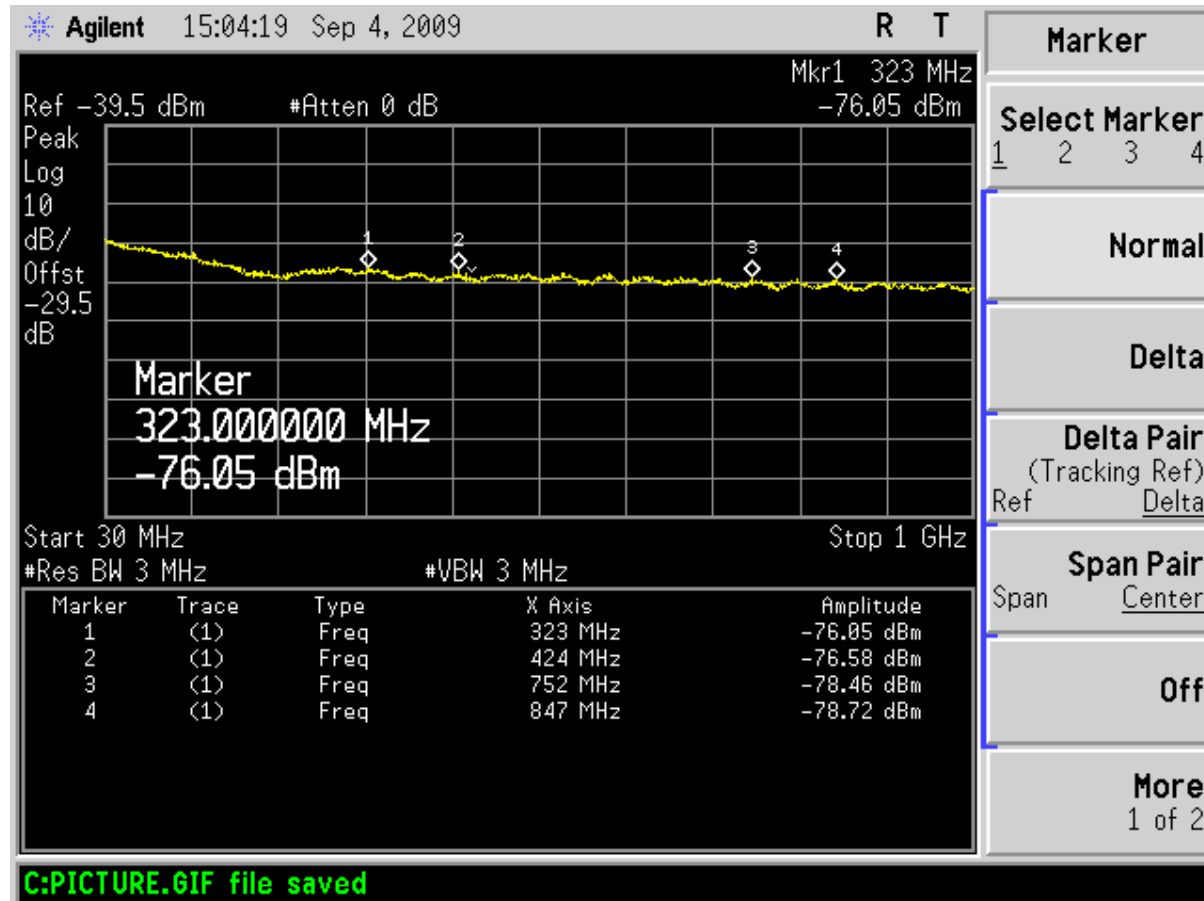
Remark: 1-4GHz is marginal result in uncertainty range

Conducted spurious emission

RF ranges	Maximun peak power level	Result/max.value
30MHz-----1.0GHz	2nW(-57dBm)	No Test
1GHz-----12.75GHz	20nW(-47dBm)	No Test
Inside the DECT band	2nW(-57dBm)	No Test

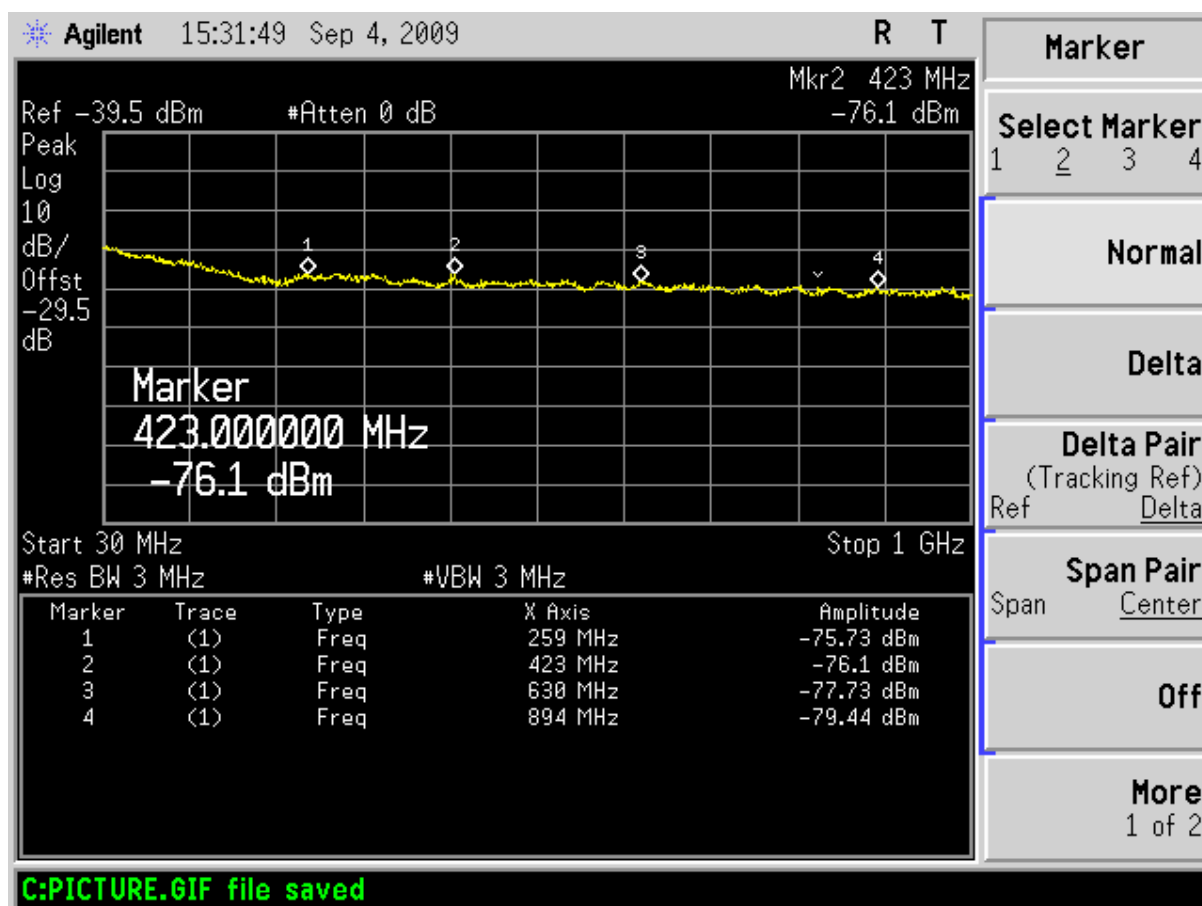
Measurement uncertainty conducted: + 0.85 dB / -0.92 dB

Appendix1 : Plotted Data of 30MHz to 1GHz(Out of broadcast band)



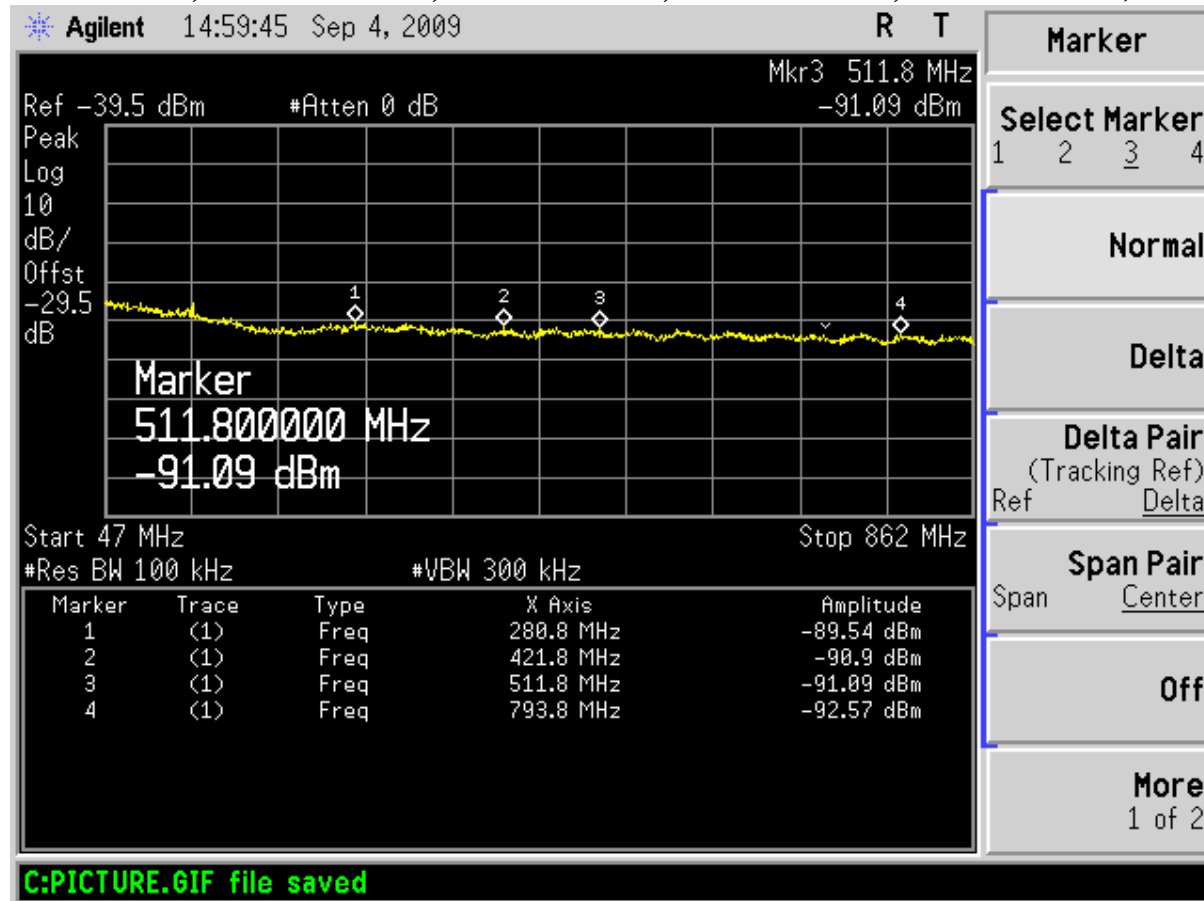
H

894MHz at V
ERP=-50.8dBm



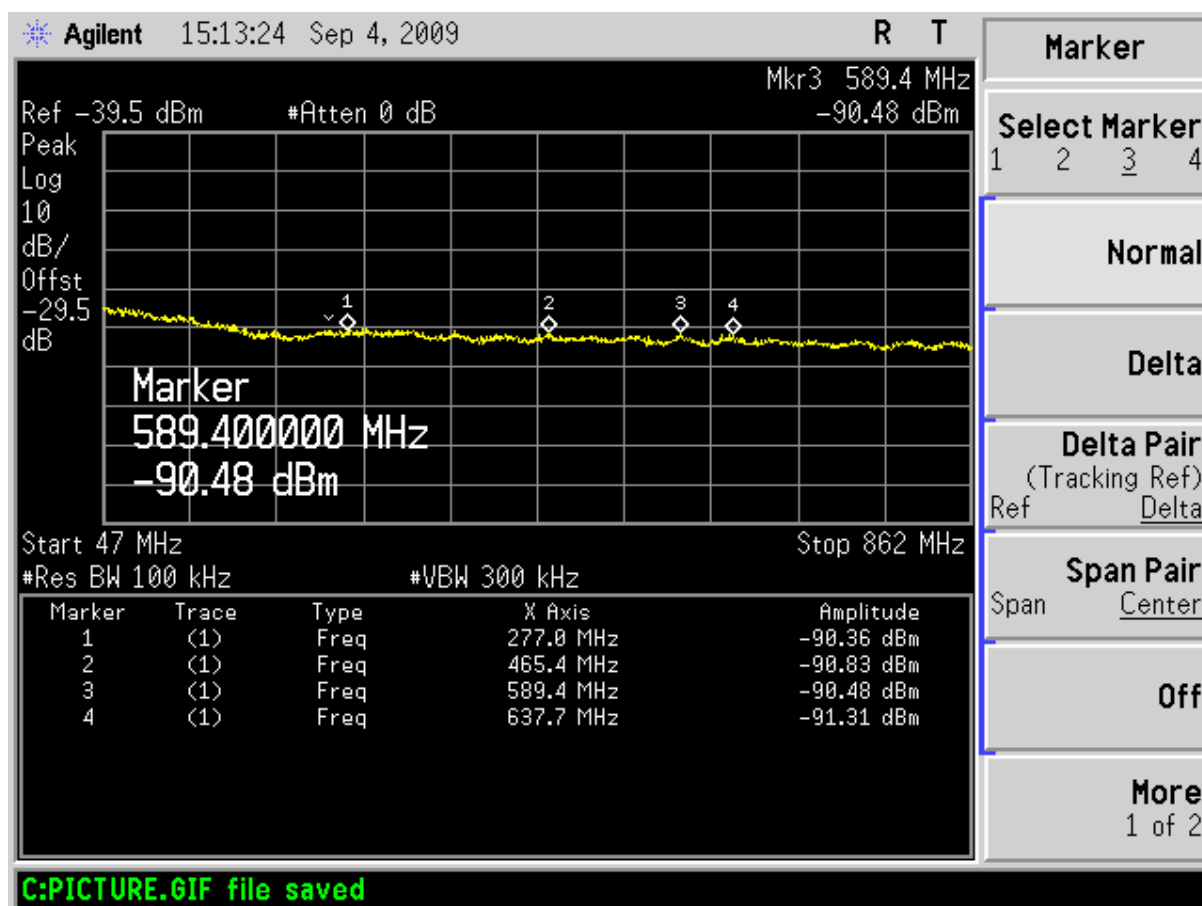
V

**Appendix2 :Plotted Data of 30MHz to 1GHz (In broadcast band,
47-74MHz,87.5-108MHz,108-118MHz,174-230MHz,470-862MHz)**



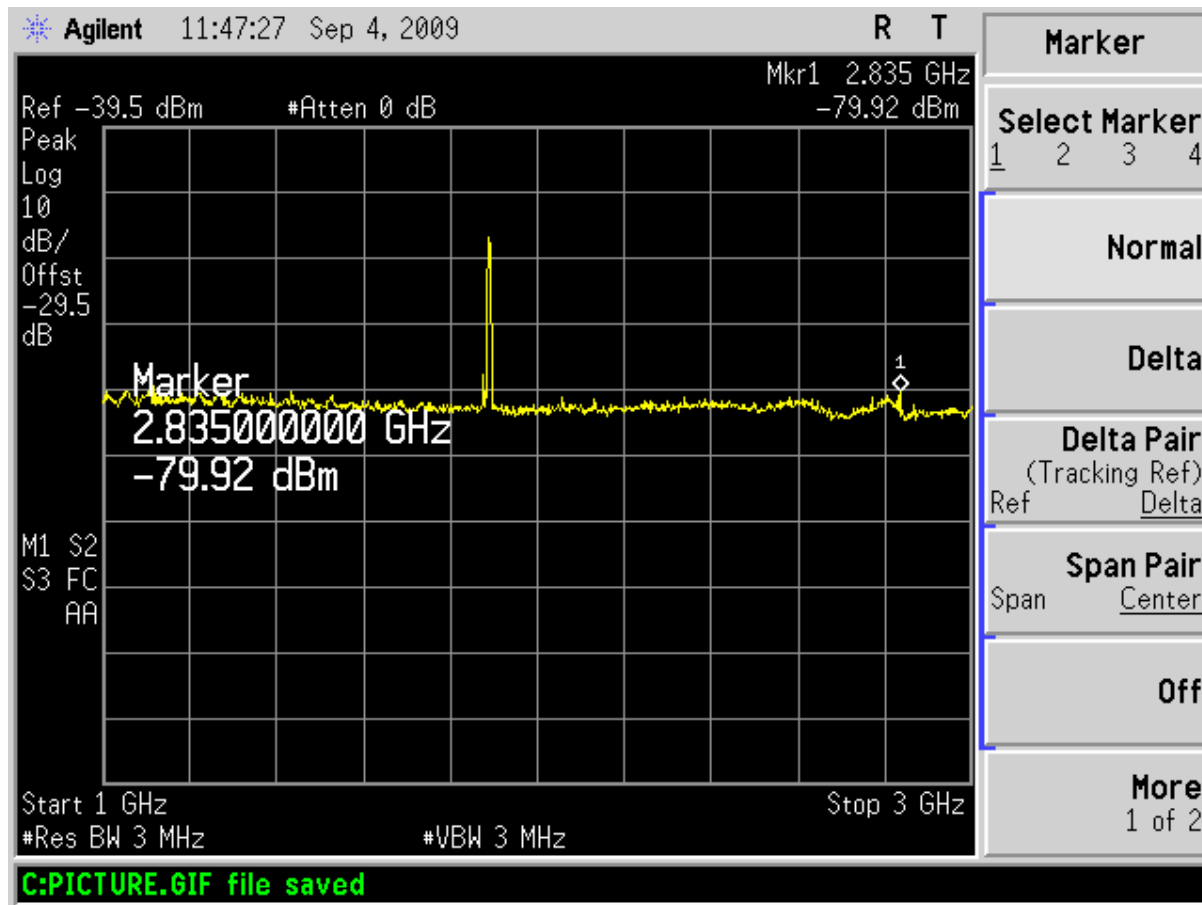
H

**589.4MHz at V
ERP=-65.4dBm**

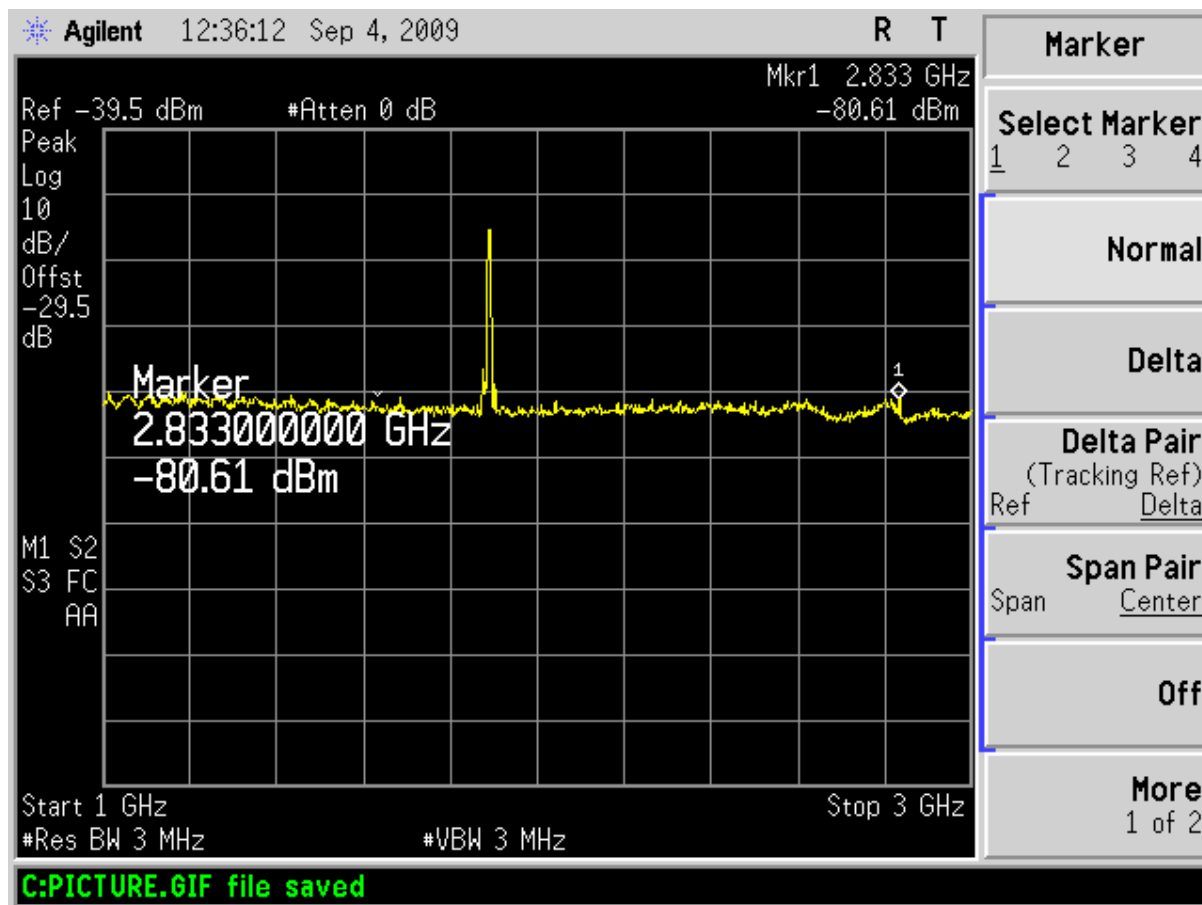


V

Appendix 3 : Plotted Data of 1GHz to 3GHz



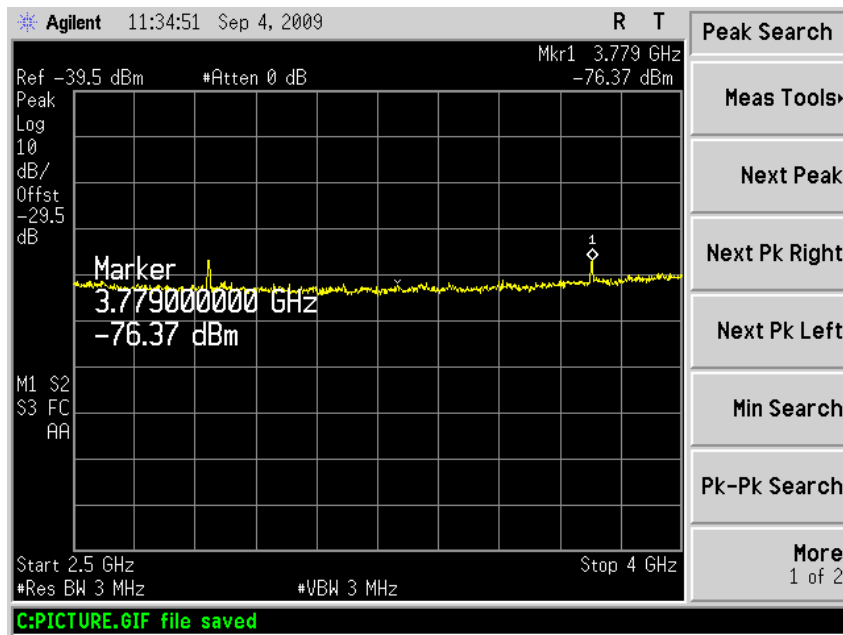
H
ERP=-40.64dBm



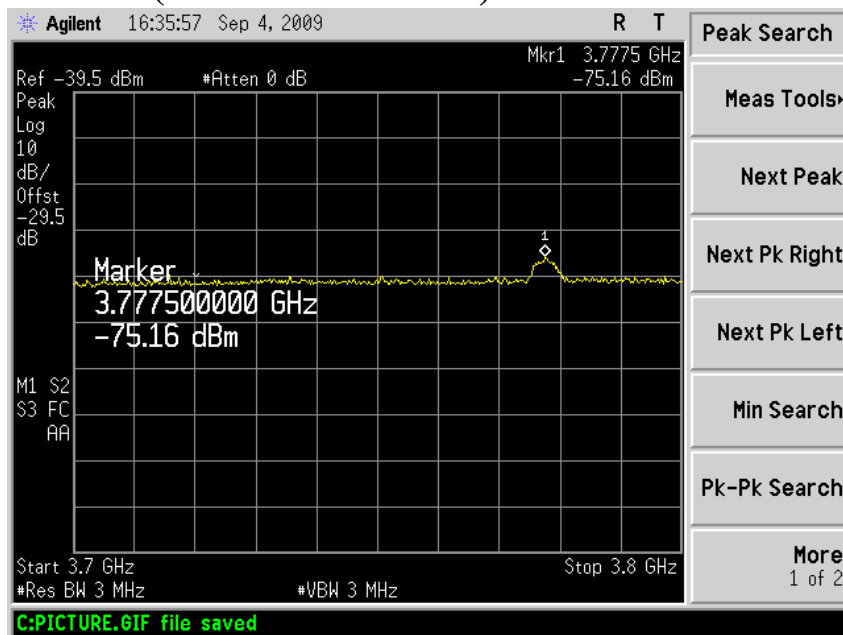
V

ERP=-41.73dBm

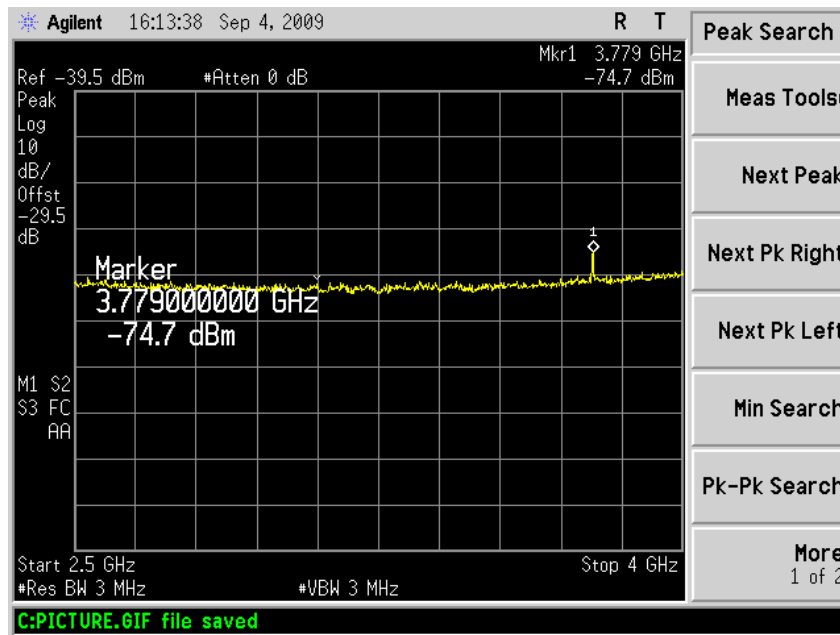
Appendix 4 : Plotted Data of 2.5GHz to 4GHz



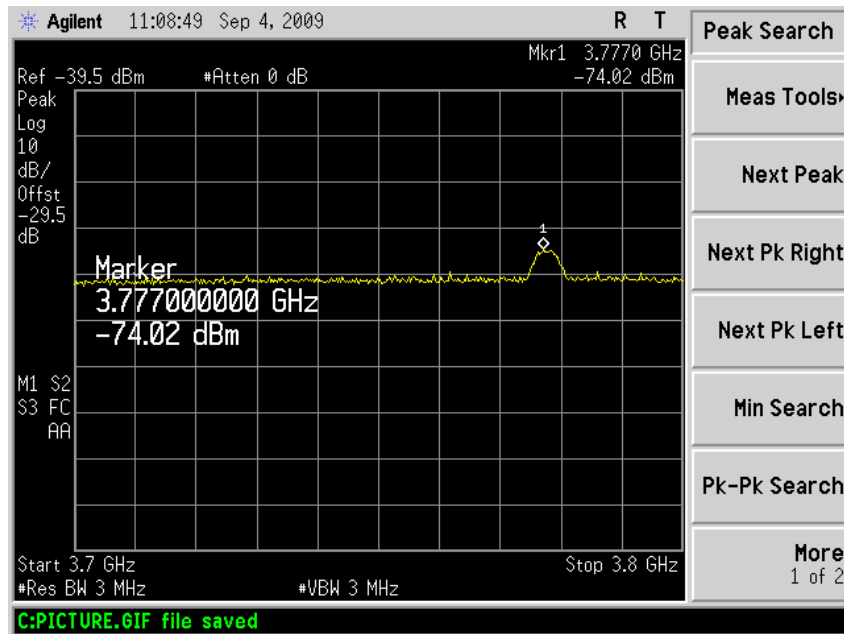
Zoom in(3.7GHz to 3.8GHz)



H
ERP=-32.29dBm



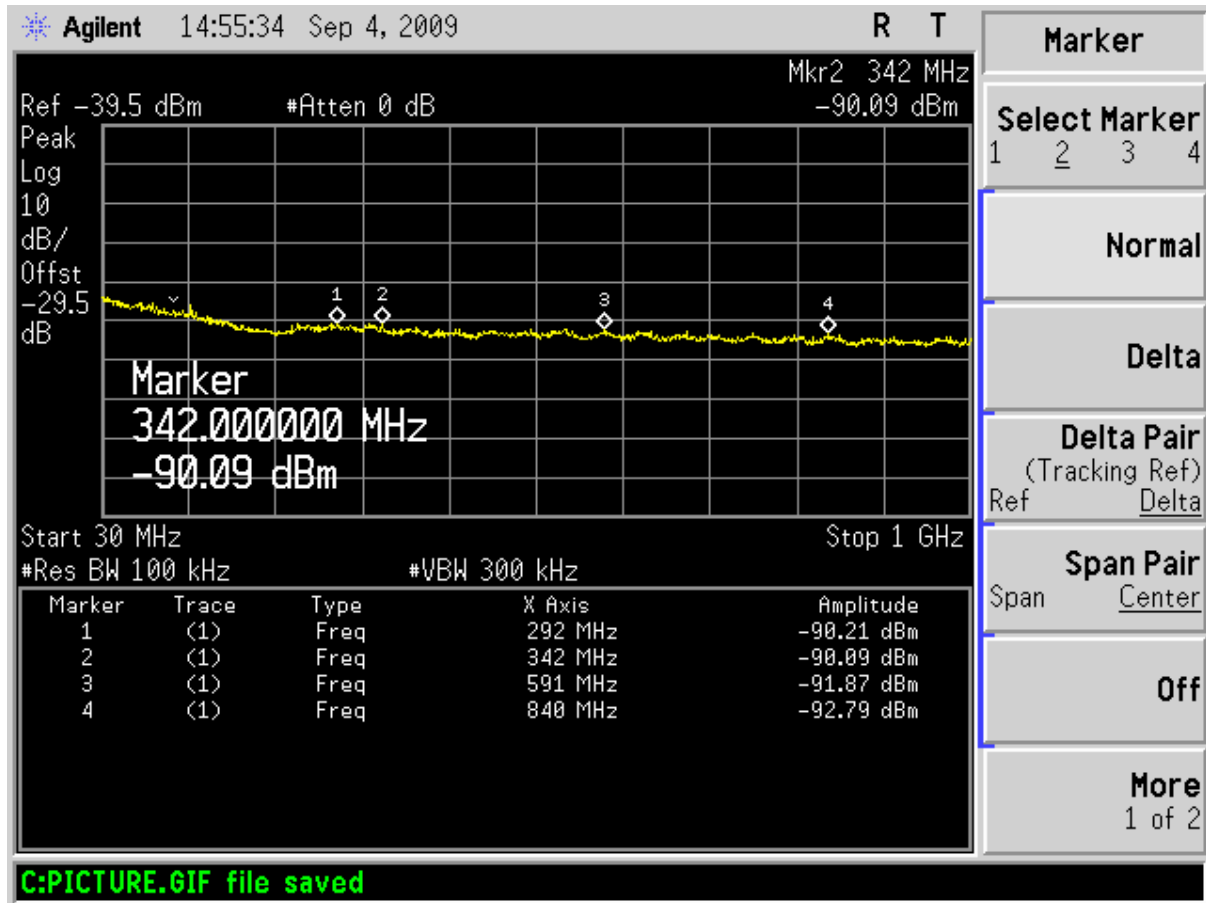
Zoom in



V

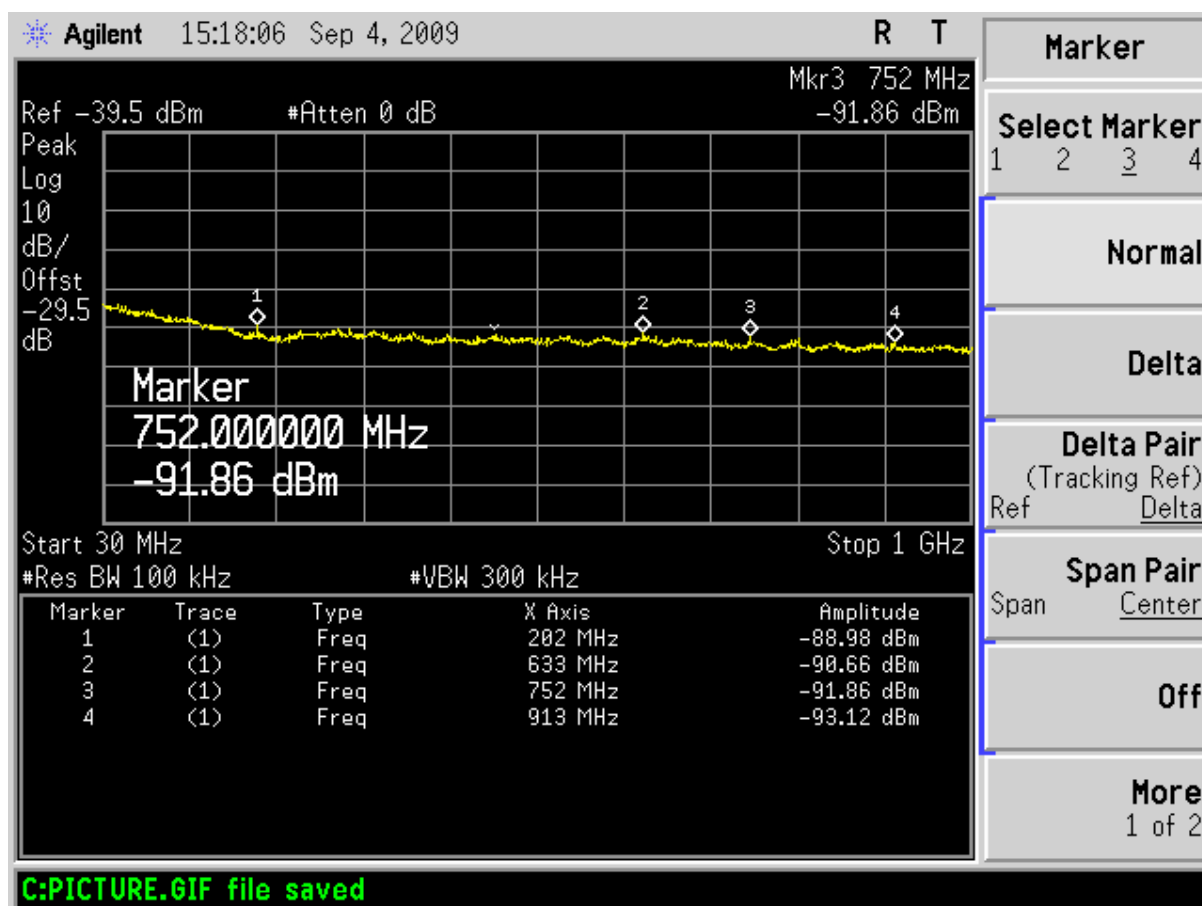
ERP=-30.69dBm

Appendix5 :Plotted Data of 30MHz to 1GHz(Radiated Idle)



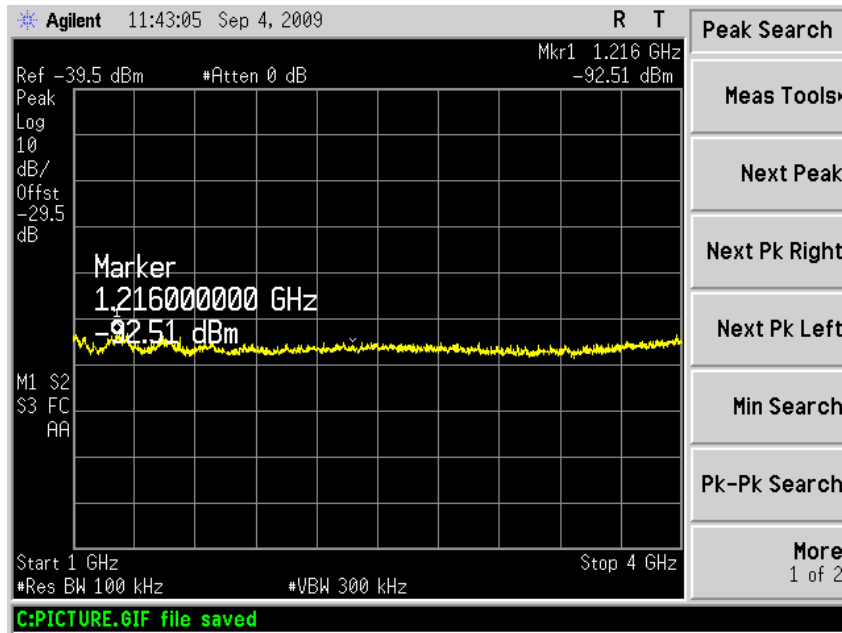
H

913MHz at V
ERP=-62.25dBm

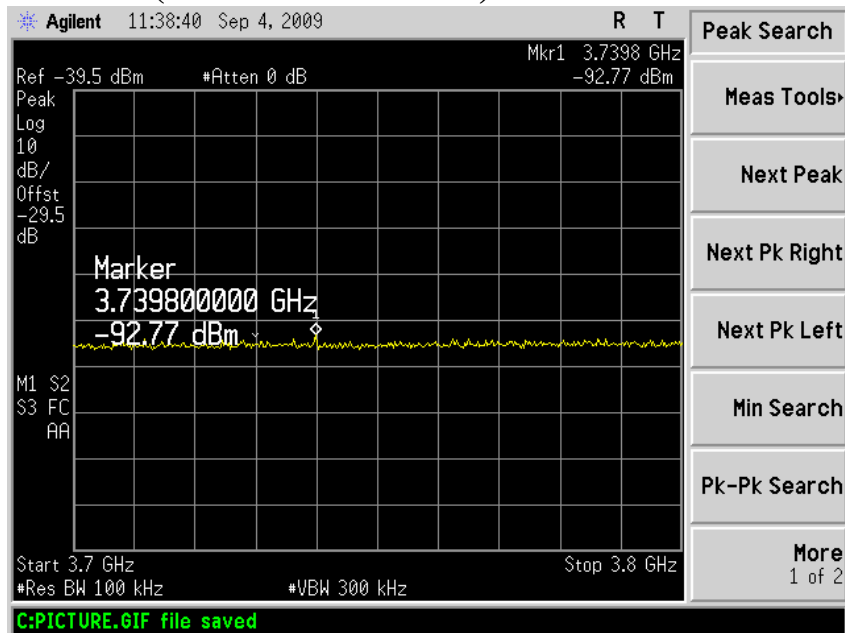


V

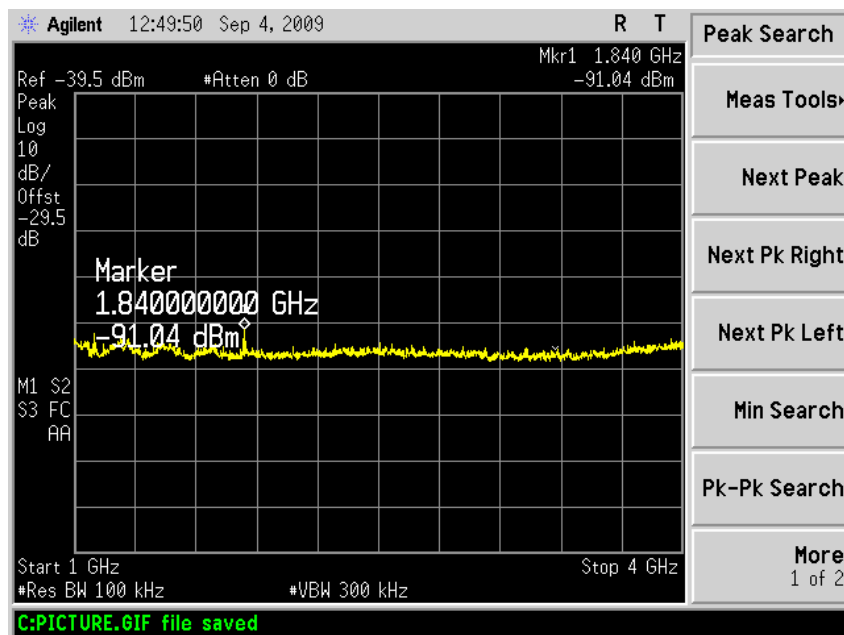
Appendix6 : Plotted Data of 1GHz to 4GHz(Radiated Idle)



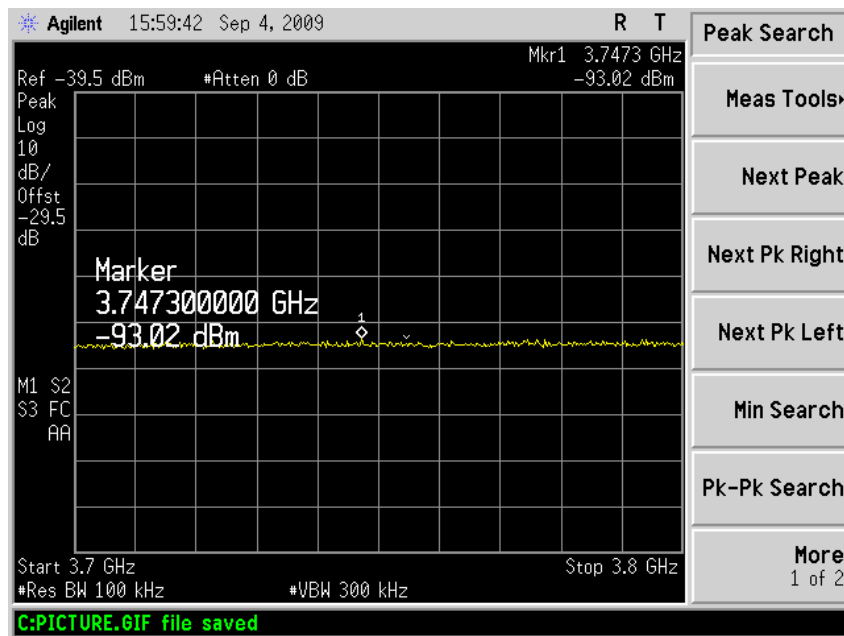
Zoom in(3.7GHz to 3.8GHz)



H
ERP=-49.43dBm



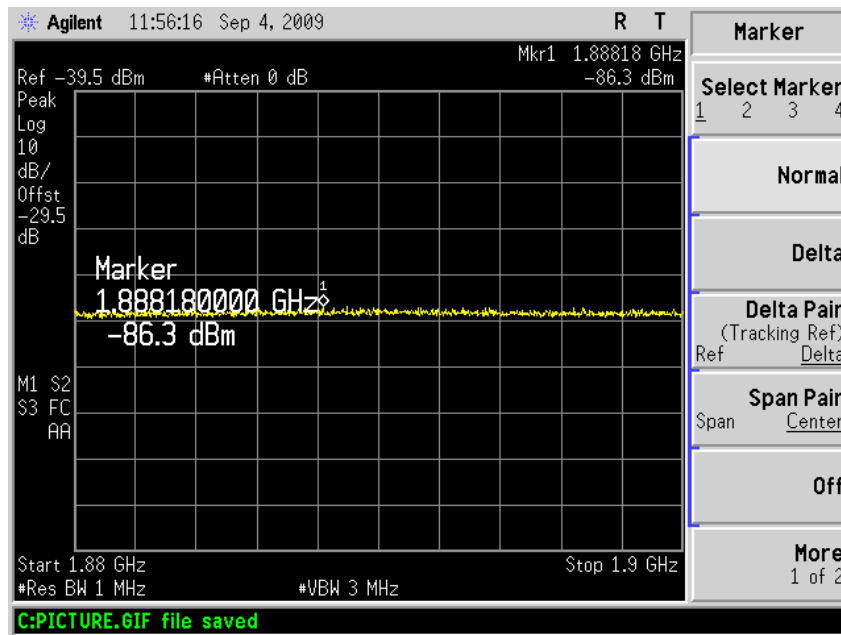
Zoom in



V

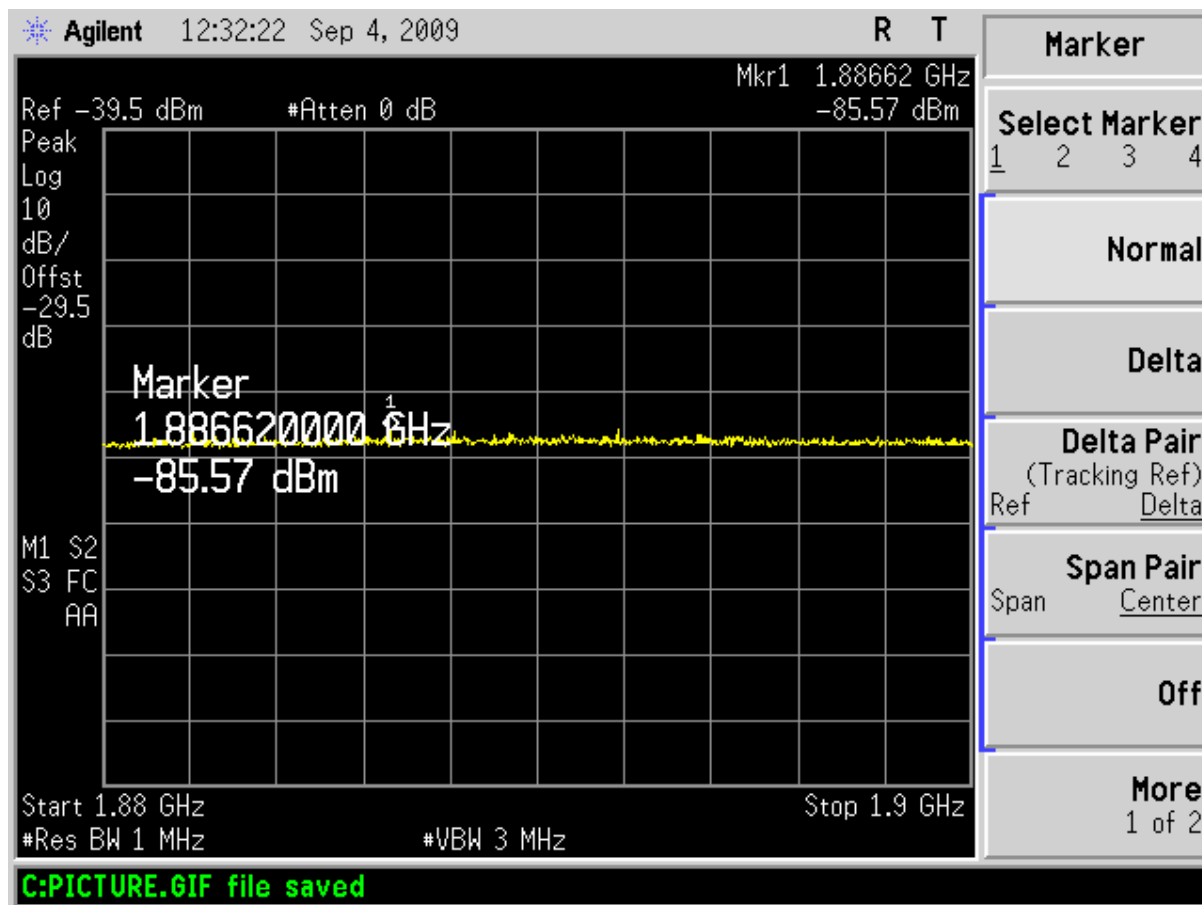
ERP=-48.73dBm

Appendix7 : Plotted Data of DECT Band(Radiated Idle)



H

ERP=-61.43dBm



V

ERP=-60.53dBm

Appendix 8 Photo of the Test Candidate (exterior)



Photo of the Test Candidate (interior)

